Amendments to the Specification

Please replace the paragraph beginning on page 12, line 15, with the following amended paragraph:

FIG. 1 is a block diagram that illustrates a broadband wireless system 100 in an example of the invention. The broadband wireless system 100 is comprised of a national data center 110, an operations network 115, an enterprise network 120, a national operations center 200, a national operations center 210, an Internet 145, a regional aggregation point 300, a regional aggregation point 310, a market hub 400, a head end 500, ~~a head end 510,~~ a market hub/head end ~~520~~ 501, and customer premises 600~~, 610, and 620~~.

Please replace the table beginning on page 13, line 19, with the following amended table:

Component	Component	Link
National data center 110	Operations network 115	111
National data center 110	Enterprise network 120	112
National data center 110	National operations center 200	~~113~~ 116
National data center 110	National operations center 210	~~114~~ 116
National operations center 200	National operations center 210	116
National operations center 200	Regional aggregation point 300	117
National operations center 210	Regional aggregation point 310	118
Regional aggregation point 300	Internet 145	119
Regional aggregation point 300	Regional aggregation point 310	121
Regional aggregation point 310	Internet 145	122
Regional aggregation point 300	Market hub 400	123
~~Regional aggregation point 300~~	~~Head end 510~~	~~124~~
Regional aggregation point 310	Market hub / Head end ~~520~~ 501	126
Market hub 400	Head end 500	127
~~Head end 500~~	~~Customer premises 600~~	~~128-29~~
Head end 500	Base antenna 160	131
Base antenna 160	Customer premises 600	128-29
~~Head end 510~~	~~Customer premises 610~~	~~131-32~~
~~Market hub / Head end 520~~	~~Customer premises 620~~	~~133-34~~
Market hub / Head end 501	Base antenna 175	132

Please replace the paragraph beginning on page 14, line 7, with the following amended paragraph:

The links ~~111-114 and 117-118~~ 111, 112 and 116-118 include firewalls (FW) 125, 130, 135, ~~140,~~ 150, and 155, respectively. A firewall is a system, hardware or software, configured to limit access to a system or network. The links ~~111-114~~ 111, 112, 116-119, ~~121-124~~ 121-123, and 126-127 are DS-3 connections. Those skilled in the art will appreciate that the links ~~111-114~~ 111, 112, 116-119, ~~121-124~~ 121-123, and 126-127 could be any type of electrical or optical connection including T-1, T-3, OC-3, OC-12, or OC-48 connections. Those skilled in the art will appreciate that the links ~~111-114~~ 111, 112, 116-119, ~~121-124~~ 121-123, and/or 126-127 could include redundant connections to increase reliability of the links.

Please replace the paragraph beginning on page 14, line 16, with the following amended paragraph:

The broadband wireless system 100 operates as follows. The customer ~~premises' 600, 610, and 620 communicate~~ premises 600 communicates with systems within the Internet 145. For instance, the customer premises 600 could download a web page from a server in the Internet 145. To download the web page, the customer premises 600 accesses the server through the head end 500, the market hub 400, and the regional aggregation point 300.

Please replace the paragraph beginning on page 15, line 27, with the following amended paragraph:

The head end 500 interfaces the customer premises 600 with other components in the broadband wireless system 100 and routes data from the customer premises 600 to the market hub 400 and vice-versa. The head end 500 collects network information for the broadband wireless system 100. The head end 500 transfers the network information to the market hub 400, the regional aggregation point 300, and/or the national operations center 200. ~~The head-end 510~~

~~operates similar to the head end 500.~~ The market hub/head end ~~520~~ 501 operates ~~similar~~ similarly to the market hub 400 and the head end 500.

Please replace the paragraph beginning on page 16, line 4, with the following amended paragraph:

The customer premises 600 exchanges data with the head end 500 over wireless links 128 and 129. The customer premises 600 has two-way wireless communication with the head end 500 because both the downstream and upstream channels are over the wireless links 128 and 129. Those skilled in the art will appreciate that the upstream link 128 could be over a non-wireless link, such as a phone line or a cable modem, which is within the scope of the invention. As shown in FIG. 1, the customer premises 600 resides within a sector 164 of a plurality of sectors 161-170, which are physical areas serviced by a base antenna 160 coupled with the head end 500 by way of a link 131.

Please replace the paragraph beginning on page 16, line 23, with the following amended paragraph:

The router 220 connects with the national data center 110, the national operations center 210, and the regional aggregation point 300 over the links ~~113, 116, and 117, respectively~~ 116 and 117. The router 220 connects with the switch 225 over a link 211. The link 211 is a Gigabit Ethernet connection. The switch 225 connects with the national performance management system 230 over a link 212.

Please insert the following new paragraph immediately before the paragraph beginning on page 19, line 1:

In one embodiment, the regional aggregation point 300 also includes a regional domain name server (DNS) 365 coupled to the switch 325 via a link 313.

Please insert the following new paragraph immediately before the paragraph beginning on page 20, line 23:

In one embodiment, the market hub 400 also includes a market domain name server (DNS) 465, an alarm system 470, an interface 475, a file transfer protocol (FTP) test server 480, and an RMON probe 495, each of which is coupled to the switch 425 via links 413, 414, 415, 419 and 421, respectively.

Please insert the following new paragraph immediately before the paragraph beginning on page 25, line 30:

In one embodiment, the head end 500 also includes a DNS 591, an alarm system 592, a collection of asynchronous ports 593, an interface 594 and a monitor system 596, each of which is coupled with switch 510. Also, the head end 500, as depicted in Fig. 5, also includes a channel combiner 536 for coupling a plurality of transmitter systems 535 to the link 531. The channel combiner 536 and the transmitter systems 535 are coupled via a link 562.